

-

Environmental Technologies Group
ROCKY FLATS SOLARPOND/PONDCRETE PROJECT

452 BURBANK STREET
EG&G BUILDING 025
BROOMFIELD COLORADO 40020
(103) 460-1573
FAX (303) 469-0214

October 5, 1992



Mr. Edward M. Lee, Jr. Technical Representative EG&G Rocky Flats, Inc. P. O. Box 464 Building 080 Golden, Colorado 80402-0464

Subject. Rocky Flats Plant Solar Evaporation Ponds Stabilization Project [WBS 431 PONDSLUDGE PROCESS TRAIN - DESIGN CRITERIA - HNUS ROCKY FLATS] ADDITIONAL INFORMATION ON WASH UP STATION RF-HED-92-0648

Dear Mr. Lee:

During the week of October 2, 1992 additional technical questions have been raised on the proposed wash up station. The attached memo summarizes conversations held between Messrs L. Collins and R. Rodrigue on the subject.

I need approval to start the installation of the containment of the wash station early this week. We have looked at a significant number of methodologies for washing the system and conclude that this method will minimize the number of halfcrates of non-spec material produced. This method could produce up to 400 less crates than earlier methods under consideration.

In the event that further questions arise, please advise

Sincerely,

HALLIBURTON NUS ENVIRONMENTAL

CORPORATION

Ted A. Bittner Project Manager

TAB/jg

Enclosures

cc: J DePriest

R Rodrigue

J. Zak

A \LTR\LEE9 RF HED-92-0648

1-0010 00015.

" , wild KECCALD

DOCUMENT CLASSIFICATION
REVELY MAINER HER
CLASSIFICATION OFFICE

To

Ted Bittner

Ricky Rodrigue

From

Shannon Phelps

Date

October 5, 1992

Subi

RCM/GROUT LOOP CLEANUP

DATA

Volume of RCM tub	40 cf
Volume of Grout Loop (3½ I D x 200')	13 cf
Usable volume of half crate	38 cf

BACKGROUND

Wash-up will be typically required at the end of processing a batch of materials. A batch is the contents of either Batch Tanks 4/5 or 6/7. A normal batch is equivalent to approximately 32 half crates. Times between the processing of batches is planned to be approximately 3 hours. The wash-up material will be pumped into half crates at the wash-up station for removing the cemented solids from the system. During the planned maintenance/downtime period, the wash-up slurry will be allowed to gravity settle separating the water phase from the solids. The liquid phase will be decanted and pumped back to the holding batch tanks located adjacent to the wash station and processed in the subsequent batch.

NORMAL WASH-UP

During normal wash-up, the RCM tub level will be almost empty (say 10 ct of product). The volume of solids would be 10 cf (tub) + 13 ct (grout loop), or 23 cf

Approximately two RCM tub volumes, or 80 ct, of brine/process water will be required to clean up the RCM and grout loop. Thus the total volume needed for a normal wash-up is 23 cf (solids) plus 80 cf (liquid) or 2½ half crates. A large majority of the flushing water will come from the two batch holding tanks. The frequency of normal wash-up will be dependant on cement build-up in the RCM and the grout loop. This will be monitored by visual inspection of RCM and monitoring pressure in the grout loop. Process water will be used at the end of the cleanup cycle for final rinsate. Process water will be stored in the process water tank. Any waters used will be pumped to the wash station and returned to the batch tanks.

We will determine the correct time interval and intensity for wash-up during testing with the actual waste material

September 16, 1992

TO-

Ted Bittner

FROM:

Brian Sheets

SUBJ:

Option 2 RCM Wash System

The purpose of this system is to facilitate a simpler operation for RCM wash-up. See attached sketch.

Proposed System

- Build a 8' x 44' secondary containment with 6" high side walls just north of batch tank containment.
- 2. Place 6 half crates in line on west side of secondary containment.
- 3. Build 2" discharge manifold to fill each bladder in half crates individually.
- 4. Build 2" vent manifold to vent each bladder in half crates to passive HEPA filter individually
- 5. Pump RCM wash water to half crates until clean, then divert final rinse to batch tank system.
- 6. As half crates become full, allow solids to settle and decant free liquid to batch tanks system as needed
- 7. Remove full half crates with fork lift as needed

Brian Sheets

cc: Ricky Rodrigue

p \shoets\9-16-tab mom

